year is having our senior managers go onboard to promulgate best practices and the expectations of our company; that will be limited to just the environment, it will also be limited to safety fee issues as well. So, we're doing a lot of work in promoting our company's expectations, policies with our seafarers, just changing culture takes time.

SPECIAL MASTER BUNDY: I suppose the special audits are part of that effort as well?

MS. TSOCHLAS: Well, internal audits are to see that we -- our procedures and our requirements are being properly implemented onboard and to identify areas of weakness and then identify areas of improvement as well.

SPECIAL MASTER BUNDY: In the link that you provided on the internal audit, nonconformities, in the first page that I've got, there was some nonconformities listed with no vessel, I think. Maybe it was — maybe that's all part of the Estia.

MS. TSOCHLAS: Yes, there were two vessels audited since July. The agenda requested for the results of audits since

July. So, our audits are carried out annually, so the other four vessels have been carried out by July and we had discussed them, the results, in the July hearing, two of the vessels were carried out since July. A number of the nonconformities were identified on the Estia.

SPECIAL MASTER BUNDY: I see.

MS. TSOCHLAS: As you have observed as well.

We try to carry out very far internal audits, because it's important for us to find out where our problems are and record our problem in order to be able to improve them, so, we do have strict — we have a strict auditing process.

SPECIAL MASTER BUNDY: I noticed that on the Estia, on the last non-conformity, had to do with the oil record book, and I think you mentioned that earlier when describing the problems with the chief engineer and his --

MS. TSOCHLAS: Yes. When our superintendent went onboard to carry out the audit, he discovered that there were some issues to do with the maintenance of the oil

record book and we had a superintendent engineer then board the vessel in order to address those issues in an effort to improve the chief engineer's performance.

SPECIAL MASTER BUNDY: What plans — was there any formal plan put in place, a performance improvement plan, which is a commonly used term, I think, for the chief engineer? I noticed that it was discussed with him, but did you have any specific plan in place for him before — and then, obviously, then when Captain Joshi went onboard, the problem, apparently, had continued.

MS. TSOCHLAS: The issue as mentioned was discussed with the chief engineer, then a superintendent engineer boarded the vessel in order to discuss further and carry out further training with the super — with the chief engineer, and then we monitored his performance. A few weeks after that, it wasn't much time after that, the audit was carried out by captain Joshi, and then we saw that the problem is continuing. So, our plan now is to repatriate him and carry out

1 training ashore. The training that will be 2 carried out ashore will be a combination of 3 sending him to an external organization in Piraeus, which carries out an oil record book 4 5 seminar and in-house training seminar that 6 will be carried out by our superintendent 7 engineers. 8 SPECIAL MASTER BUNDY: Any other 9 questions? 1.0 MR. CHALOS: No. 11 MR. O'CONNELL: I had one question. 12 SPECIAL MASTER BUNDY: Yes. 13 MR. O'CONNELL: On the scheduled audits, 14 it looks like you do eight internal audits 15 once a year, do you find that effective? 16 Have you considered doing them more 17 frequently? 18 MS. TSOCHLAS: I didn't hear you 19 properly. 20 MR. O'CONNELL: Like I said, do you find 21 that effective or do you give any 22 consideration to doing internal audits more 23 frequently? 24 MS. TSOCHLAS: We have the requirement 25 for a special audit to be carried out once a

year. We have -- attendance is carried out twice per year, so that means the vessel is visited by our superintendents three times a year.

MR. O'CONNELL: And what's the difference?

MS. TSOCHLAS: The combination of those, I think, provides adequate monitoring of the vessel.

MR. O'CONNELL: And what's the difference between attendance and an audit?

MS. TSOCHLAS: The audit — the auditor will focus on the implementation of procedures, and in this case environmental audits he will focus on the implementation of environmental procedures, that may be carried out while the vessel is in port. It's a much shorter time. During attendance, the superintendent has to ride with the vessel and he will cover all areas of the vessel, safety, navigation, the environment, and he will insure that the procedures are being properly implemented and the standard of the vessel is being maintained to the company's requirements. So, attendances are actually

more -- there's more scrutiny when it comes to attendances.

MR. WIGGER: Krystyna, are the environmental audits conducted in conjunction with the ISM audits, or are the ISM audits a separate visit?

MS. TSOCHLAS: It depends on when they are due, because we carry out ISM and ISPF audits once per year as well. Of course, we try to have them carried out together at the same time, but it's not necessarily that way. It also depends on the time constraints. If the auditor is attending the vessel only for the port of call, he will carry out only one of the three audits.

MR. WIGGER: Your question about, is an annual audit the ISM code, they require an annual audit, which is pretty much the standard that's acceptable, I guess, to monitor performance for, you know, for the safety, and under the ISM code there's environmental areas, too, to be looked at.

MR. O'CONNELL: Yeah, and that's one of the reasons I asked the question. In every one of these cases, everybody has an ISM

audit and a lot of times violations are found 1 2 in those audits. 3 MR. CHALOS: But I think what Miss Tsochlas --4 MS. TSOCHLAS: Between the attendance 5 and various audits, a number of areas are 6 overlapped. So, we have at least --7 basically, the vessel is vetted three times a 8 9 year. I've got a 10 SPECIAL MASTER BUNDY: 11 question that's a little off topic, but that 12 was raised to me, and that is, the seafarers 13 that were onboard the Kriton that were either involved in the violation itself or were the 14 15 people that testified, are they still working 16 for the company? 17 MS. TSOCHLAS: No. SPECIAL MASTER BUNDY: None of them? 18 19 MS. TSOCHLAS: No, none of them. MR. O'CONNELL: Does that include the 20 21 mariners that brought the issue to light as well as the individuals that were involved in 22 23 actually, you know, discharging? MS. TSOCHLAS: The individuals that were 24 25 involved in the discharging are not

1 rehirable. The seafarer that brought the 2 issue to light has never come back to be 3 employed by us. SPECIAL MASTER BUNDY: Weren't there 4 5 more than one so-called whistle-blowers or 6 people that brought the issue to light? You 7 mentioned that the one individual, I thought 8 there was more than one. I might be wrong on 9 that. 10 MR. CHALOS: I can't recall. I think 11 only one got a reward. MS. TSOCHLAS: From what I understood, 12 13 because I wasn't working for the company at 14 the time, but the documentation that I've 15 read, the electrician was the seafarer that 16 brought the issue to light. 17 SPECIAL MASTER BUNDY: Right. And then 18 there were --19 MS. TSOCHLAS: There were other 20 seafarers who were involved in the 21 discharging and who had testified that they 22 were involved with the discharging. 23 SPECIAL MASTER BUNDY: Okay. Is that 24 your recollection, Mr. Chalos? 25 MR. CHALOS: I'm trying to remember.

think -- I don't remember if it was one or 1 2 two people that got rewards. 3 4 5 it came to light. 6 7 8 9 company. 10 11 12 13 14 15 16 17 18 have a recollection. 19 20 21 22 reward got the reward. 23 opposition to the reward being given. 24 What do you recall about that? 25 MR. KARAGIORGIS: You know, I remember

MR. O'CONNELL: Yeah, I don't remember because I wasn't that closely involved when MR. CHALOS: But certainly the electrician asked and got a reward, and he's never been back trying to get a job with this SPECIAL MASTER BUNDY: A number of these seafarers, as I was required to read the transcript, and I did, were represented by counsel, and a question that was raised to me was whether or not these guys had all made applications for a reward or a dissolution part of the finding and whether motions had been made in that regard or what. Maybe you MR. CHALOS: Yeah, there was at least one motion made, there may have been more motions, but I think whoever applied for a I mean, there was no

that there was the primary whistle-blower was the electrician and there were two, I believe, two other individuals who stayed in the same hotel room with him, so I'm just kind of guessing back that I think there may have been two other guys who were sort of cooperating with him. Whether or not they made an application for a whistle-blower, I don't remember.

SPECIAL MASTER BUNDY: And those two other guys, they're not employed by the company anymore? Do you remember who they were?

MR. CHALOS: I don't remember offhand.
But they haven't applied to be reinstated,
have they?

MS. TSOCHLAS: No, they haven't. None of the seafarers that were involved in the issue and who were detained by the authorities have applied for reemployment.

SPECIAL MASTER BUNDY: So, they worked out their contract, it sounds, mostly by being in custody here, and after the completion of their contract, they were repatriated and they never applied back --

1	MS. TSOCHLAS: And they never came back
2	to us.
- 3	MR. NORTON: Their contract required
4	that they be kept up at a hotel.
5	SPECIAL MASTER BUNDY: I'm not
6	suggesting they were in custody or anything.
7	MR. CHALOS: They were here a long time.
8	SPECIAL MASTER BUNDY: They were here a
9	long time and their contract came to an end,
10	and they never reapplied for another
11	contract. I think that's what I'm hearing.
12	MS. TSOCHLAS: Exactly.
13	MR. CHALOS: Except the ones that were
14	actually involved in the wrongdoing, they
15	wouldn't have been rehired, in any event.
16	SPECIAL MASTER BUNDY: Right. But they
17	wouldn't have
18	MS. TSOCHLAS: None of the seafarers
19	applied for a contract. The seafarers that
20	were directly involved with the discharging
21	were in the status of rehirable, but we
22	haven't actually acted on that status,
23	because none of the seafarers had reapplied.
24	SPECIAL MASTER BUNDY: But the ones that
25	were not actively involved in the

discharging, they would be considered for reemployment if they reapplied.

MS. TSOCHLAS: They may be considered because they have -- they're whistle-blowers, but because we have a non-retaliation policy, they would be considered.

now, if there's nothing more on the internal audit. Just one small thing. Apparently, I misunderstood the Antwerp incident aboard the Kriton about what the problem was. I thought that the problem was the ODME piping went through the fuel tank and corroded and then leaked fuel. Was I wrong about that?

MR. KARAGIORGIS: No, no, no, correct.

MS. TSOCHLAS: You were correct about that, but it was the starboard fuel tank. The onboard piping passed through the starboard fuel tank. We've replaced that piping in full, so it's a new pipe and it's not a concern, it's not because it was new and in good condition. Our concern is the port fuel pipe that has ballast piping that passes through and it's an old piece of piping and it's in danger of corrosion and

1	holding, so that's why we arranged at the
2	first opportunity for our superintendent
3	engineer to enter the tank and inspect the
4	piping.
5	SPECIAL MASTER BUNDY: And that
6	occurred?
7	MS. TSOCHLAS: That was in November in
8 .	West Africa.
9	SPECIAL MASTER BUNDY: Yeah, I see the
10	link to the inspection report, right.
11	MS. TSOCHLAS: Because the piping is on
12	one side of the vessel, it's not symmetric.
13	there aren't two pieces of piping.
14	SPECIAL MASTER BUNDY: The next topic
15	was the issue of the onboard flexible hose
16	inventory. I think I understand what you've
17	stated there, and so I just you know,
18	Captain Wigger, if you need further
19	clarification or if the Government needs
20	further clarification about that issue, we
21	can address it, otherwise we can move on.
-22	MR. WIGGER: I don't have any issues.
23	SPECIAL MASTER BUNDY: Mr. O'Connell or
24	Lieutenant Commander Burgess?
25	MR. BURGESS: No.

Is that a requirement 1 MR. O'CONNELL: 2 that Ionia did on their own, or is that a 3 requirement for the Special Master hearing, the flexible hoses? 4 5 SPECIAL MASTER BUNDY: That came up initially in an audit of the Fidias, I 6 7 believe. 8 That was something that I MR. WIGGER: 9 think we recommended as part of the audit in 10 order to protect and account for any hoses in 11 the engine room and, as a result, Ionia 12 implemented that as part of their EMS, it 13 wasn't a specific requirement of the scope of 14 work. 15 MR. O'CONNELL: That's what I thought. 16 I just wanted to make sure. SPECIAL MASTER BUNDY: And as to the EPA 17 18 vessel general permit and the oil transfer 19 procedures, it sounds like the responses are 20 complete, any further questions on that by 21 anybody? 22 Miss Tsochlas, how are you doing? 23 you want to take a break? 24 I'm fine. MS. TSOCHLAS: 25 SPECIAL MASTER BUNDY: Because the next

topic is the Estia audit. I guess I would welcome questions or comments from Ionia or from Captain Wigger, or the Government on any particular issue that was raised on the recommendations made by the auditor rather than us go through each one seriatim, if we wanted to take a break for a few minutes and review it so that we can focus our questions, maybe that would be a good idea.

It's what? Five minutes to one.

What time is it in Greece?

MS. TSOCHLAS: It's eight o'clock.

SPECIAL MASTER BUNDY: Why don't we take a five minute break, we'll come back and be prepared to address the Estia audit. And the question about the application for the Estia to be permitted to trade with the U.S. and see where we are on that and what might additionally reasonably be required or what has already been done that would allow that to happen where we stand on that issue.

Okay. Let's go off the record for five or 10 minutes and everybody can take a personal break.

(Whereupon, a recess was

held.)

SPECIAL MASTER BUNDY: I think that the question of the Estia audit is one that we ought to take a good, close look at, because I think that's particularly important, and so, I don't know whether it would be best — and, of course, the things that are most important are the recommendations seeking a response — or observations with recommendations, I should say, and Ionia's response.

So, I think it might be productive, despite what I said before, to just go through those one by one, and we could figure out if there's substantial agreement on the observation and whether the recommendations have been addressed, or if there's disagreement about whether they should be, but I just want to make sure that we have a good, complete record on all of those issues.

So, let's see, the first question was the sounding log question and it sounds from reading the response that Ionia has taken corrective action on that, and is there anyone that believes that they should take

additional corrective action or they just 1 2 have questions about the nature of the action that was taken? 3 I'm looking at slide 80. MR. CHALOS: 4 SPECIAL MASTER BUNDY: Which shows what 5 steps have been taken. And then if we go on 6 7 to slide 81, which is the observation regarding the ODMEs, does anybody have any 8 9 further observations or questions about that? 10 MR. O'CONNELL: I have a couple of 11 questions. Was the ODME used prior to the discovery 12 13 of the malfunction? 14 MR. WIGGER: No. 15 MS. TSOCHLAS: Pardon? 16 MR. O'CONNELL: Was that ODME used prior 17 to the discovery of the malfunction? The ODME, we require the 18 MS. TSOCHLAS: ODME to be tested on a monthly basis. During 19 20 the routine test of the ODME, there was a We followed all the 21 malfunction of the ODME. 22 procedures and the requirements, as we should have, to the letter, we informed the 23 classification society, who, in turn, 24 25 informed the flag administration and we

ordered the necessary spare parts in order to be replaced in order for the ODME to be made functional again. The ODME was repaired in Antwerp on the 17th of December, and I've attached the technician's report who ordered to carry out the repair as well as the reinstatement of the IME, which was reinstated once the classification society had attested the satisfactory function of the ODME.

MR. O'CONNELL: Is the ODME used regularly on that vessel? When you were onboard, did you look at the oil record book to see if it was used?

MR. WIGGER: We do. I was not the one that did the audit, but it really is only used if they have an at-sea discharge in their slop tank. And, generally, most ships are not discharging slops at sea and Ionia has not probably used the ODME.

MR. KARAGIORGIS: Also --

MS. TSOCHLAS: We use it very infrequently. Infrequently.

MR. WIGGER: And I'm trying to think if the audit report mentioned the last time the

ODME was issued, but, more often than not, 1 when we reviewed the -- there's actually two 2 3 oil record books, you have the machinery and then you have the cargo oil record book, and 4 you very seldom see, at least of late anyway, 5 entries for the use of the ODME discharge or 6 7 slops. MR. O'CONNELL: I just asked the 8 question, because when I looked at the 9 Ploutos, that was in there, they said they 10 11 don't use it. There was a similar statement. The service report that was provided. 12 13 Sorry, I didn't hear you. MS. TSOCHLAS: The service report that 14 MR. O'CONNELL: was provided by Asmitech Limited. One of the 15 16 last lines, P.S. the flow meter's probe valves are found closed and left them that 17 way, the normal operation, both of them 18 19 should be open. MR. WIGGER: On the flow meter, normally 20 there's a seal on the flow meter, too, in the 21 22 Right? open position. 23 MR. KARAGIORGIS: Yes. MR. WIGGER: So, it should be --24 25 MR. KARAGIORGIS: Because the flow meter

1 is read discharging the slop, and this is --2 COURT REPORTER: Could you start again? MR. KARAGIORGIS: Because the flow meter 3 is read, the discharging quantity to the 4 5 outside, discharging quantity of the slop 6 water outside. So, those valves in operation 7 are open. The point you're making is 8 MR. CHALOS: 9 if they're not being used, they should be closed? 10 11 MR. KARAGIORGIS: Yes. 12 MR. WIGGER: But for operation, they 13 need to be opened, otherwise they read. 14 Now, again, I didn't do the audit on 15 this one, but many times when we see the ODME 16 and we look at the valves, sometimes is 17 there -- is there a seal on the flow valve, 18 is it sealed in the open position? 19 MR. KARAGIORGIS: No, no. There's no 20 seal on the flow meter. There is no seal on 21 flow meter. 22 And that's not required, MR. WIGGER: 23 but some vessels have done that, they 24 actually put seals on the connections for the

sampling as well as the flow meter, but

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1 that's why I asked if there was a seal, 2 but --3 MR. KARAGIORGIS: The vessel was empty 4 at that time, so there's no reason to put 5 seals on this flow meter. Also, make sure 6 that and make clear that in case that the 7 ODME is not fully operational, you are not --8 you are not able to discuss any quantity to 9 the seal because if the flow meter reads 1.0 zero, values cannot open the report. 11 MR. CHALOS: If it reads zero, you 12 cannot open. 13 MR. KARAGIORGIS: It's automatic, you 14 cannot override it. So, each case that the 15 flow meter reads zero discharging, close the 16 overflow valve and not allow it to open. 17 MR. WIGGER: Right. You can't discharge 18 the ODME with the flow meter closed? 19 MR. KARAGIORGIS: Yes, without the flow 20 meter. 21 It has to be opened to MR. WIGGER: 22 discharge. 23 So, your question is, is it significant? 24 MR. O'CONNELL: Well, I guess, my 25 question would be, is the ODME being -- was

1	it being used prior to this? That should be
2	easy to find out. It should be logged in the
3	record book.
4	MR. WIGGER: It would be in the record
5	books?
6	MR. KARAGIORGIS: If it is required, we
7	can trace all information and provide it to
8	you.
9	MR. WIGGER: You can provide all of that
10	information?
11	MR. KARAGIORGIS: But as far as I know,
12	the last year never did they use the ODME.
13	MR. WIGGER: Which service report are
14	you looking at?
15	MR. O'CONNELL: This one. My question
16	is just stemming from the fact that it should
17	be open to operate properly.
18	MR. WIGGER: Normal operation, both of
19	these valves should be open.
20	MS. TSOCHLAS: And the ODME is not able
21	to operate unless they are open.
22	MR. O'CONNELL: Correct.
23	MR. WIGGER: But it is a valve that you
24	open and close.
25	MR. O'CONNELL: I don't have any further

questions.

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SPECIAL MASTER BUNDY: The next question is about the flexible hose inventory.

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Was that handled to your satisfaction?

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MR. WIGGER: Yes. The only -- the issue

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we normally have with the flexible hoses inventory is that the hoses are inventoried normally, they're tagged, they're identified, and there's accountability as far as the hoses in their use. The area that we find deficient is the control of the hoses. other words, are they -- are they locked up, are they in a caged area, can someone have access to them without the chief engineer's knowledge or, you know, without accountability? So, from that aspect, there's sometimes issues. Now, the finding by Captain Joshi was -- let's see, recommend the hoses be identified, if numbered, diameter and purpose of use on the label to insure they are properly controlled and accounted for and the inventory list posted at the location, and then the response is that all of that is recorded and the procedure has been revised and required that

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the above information on the tags as recommended by the author.

So, I guess it technically complies with Captain Joshi's recommendation, but the next audit may again look at that and say, well, okay, you've done that, but how are you controlling the hoses, so that might be something further that Ionia should look at. Again, not knowing, not having been on that ship, but to understand how they're actually being controlled and issued for use.

MS. TSOCHLAS: In the previous item on the agenda, the issue of securing the hoses has been addressed. We've changed — we've amended our procedure and we have now a requirement in place where all flexible hoses that are not for safety purposes, obviously, are to be secured. So, they are locked away and the chief officer has custody of access to where the flexible hoses have been secured and permission has to be requested from the chief officer for those flexible hoses to be used.

MR. WIGGER: That, you know, is more than meets the requirement.

MR. CHALOS: And its all part of their 1 2 environmental compliance program. MS. TSOCHLAS: We amended the procedure 3 in the program to include the security. 4 5 SPECIAL MASTER BUNDY: And when you 6 amend procedures such as this, how are the seafarers notified of that? 7 MS. TSOCHLAS: Well, we amend the 8 9 procedure in the environmental management plan and then we send the revised procedures 10 11 onboard and request the vessels to confirm that if they have implemented those revised 12 procedures, then we make sure that all the 13 superintendents that board our vessels are 14 also made aware of those procedures, and when 15 they go onboard to carry out an order or an 16 17 audit, they advise whether those procedures 18 have been implemented. SPECIAL MASTER BUNDY: We talked about 19 20 the training issue already, I don't think we 21 need to deal with that anymore. I was confused about the forms that were 22 described about the daily checks of the 23 enviro-logger, a recommendation of a five --24 25 MS. TSOCHLAS: First of all, Captain

Joshi mentioned the environmental form number 24. We didn't have an environmental form number 24, he was referring to number 23, which is the SWOMS checklist.

SPECIAL MASTER BUNDY: Okay.

MS. TSOCHLAS: That's why in my response I refer to the form 23.

SPECIAL MASTER BUNDY: And in looking at -- we have that up on the Powerpoint now, slide number 90, and in looking at it, I think it would probably be helpful if we went through in a little more detail.

Now, the SWOMS unit was commissioned on the 9th of November on the Estia. Form 23 requires comparison of the manual soundings and the SWOMS soundings on a monthly basis. And I think that it would be helpful for us to go back and see how you used the SWOMS data and in what kind of forms that you use it. When you say are compared on a monthly basis, exactly what is compared and how is it compared?

MS. TSOCHLAS: First of all, the SWOMS checklist is used by the chief engineer onboard. That checklist has daily checks,

SWOMS readings.

only check it externally. The chief engineer checks that the unit is functioning and printing as it should be on a daily basis and he carries out a cursory check that the manual soundings are in agreement with the soundings that are being recorded by the SWOMS on a daily basis. On a monthly basis, he records that comparison — he records the comparison. This is done by the chief engineer. On the other hand at the office, all of this data is sent to the company on a monthly basis and we carry out the daily comparison of the manual soundings with the

weekly checks, and monthly checks, the daily

checks -- because the SWOMS cannot -- he has

no intervention with the SWOMS unit, he can

SPECIAL MASTER BUNDY: But I do that a month after they actually occur. So, on the 1st of August, SWOMS data is logged by the enviro-logger, presumably what you're saying is the chief engineer will look at that data on that day and compare it with any soundings that occur?

MS. TSOCHLAS: Well, he does, but he is

required to check off that he has carried out that action on a daily basis.

SPECIAL MASTER BUNDY: Did you provide us with a copy of the SWOMS checklist?

MS. TSOCHLAS: No, I didn't. I'm sorry.

MR. KARAGIORGIS: Sorry. We didn't.

Krystyna, officer chief engineer provided with instruction to provide the maximum discrepancy of the manual between manual soundings and environmental readings. So, chief engineer everyday takes out, okay, and it has also the printout of the SWOMS, at the end of the month he reports the maximum discrepancy between manual soundings and enviro-log readings. So, that is not only at the end of the month I have only one could be a little difference, I send this to the office. Okay. So, report the maximum discrepancy between manual readings and SWOMS readings.

SPECIAL MASTER BUNDY: The SWOMS checklist that the chief engineer fills out, does he do that everyday?

MR. KARAGIORGIS: Yes, there are daily, weekly, and monthly reports.

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MR. WIGGER: But the observation in this case went beyond recommendation for consideration that since the data is available, why not record it? Because right now you're saying he's sort of checking something.

MR. KARAGIORGIS: Yeah.

MR. WIGGER: I guess I'm not really
100 percent sure if the response was
responsive, except for the fact that the form
was developed and it is what it is and it
doesn't require daily, so, you've met the -you're responsive to the observation in the
sense that you considered it, but you don't
think it's necessary to record on a daily
basis.

MS. TSOCHLAS: We have characterized the SWOMS unit as a critical piece of equipment. In the event that we have a large discrepancy, that's considered a defect. Any critical equipment that is defective has to be — the seafarers have to report it immediately to the company. So, we have a process in place for that.

If the chief engineer suspects on a

daily basis that the readings aren't in line, 1 2 in the event that he finds there's a large 3 discrepancy, he will have to notify the 4 technical manager of the company. 5 SPECIAL MASTER BUNDY: What's the 6 definition of a large discrepancy? Well, the maker considers 7 MS. TSOCHLAS: 8 an acceptable tolerance of five percent. 9 over five percent discrepancy is considered 10 an alarming discrepancy. 11 SPECIAL MASTER BUNDY: The way things 12 are now, if the chief engineer on, let's say, 13 August 10 notices a discrepancy of more than 14 five percent between his manual sounding and 15 the enviro-logger, what does he do? 16 MS. TSOCHLAS: He's required to complete 17 a defect report and send that to the company. 18 SPECIAL MASTER BUNDY: Immediately? 19 MS. TSOCHLAS: Sorry? 20 SPECIAL MASTER BUNDY: Immediately? 21 Right away? 22 MS. TSOCHLAS: Yes. All defects to critical equipment have to be reported 23 24 immediately, and we've included the SWOMS in 25 the list of critical equipment available

1 onboard. If -- what the 2 SPECIAL MASTER BUNDY: 3 chief engineer looks at everyday from the enviro-logger, is that a printed out piece of 4 5 paper, or is it displayed on a screen? MS. TSOCHLAS: It's a printout. There's 6 a ribbon and you can see the printout of the 7 8 day. 9 SPECIAL MASTER BUNDY: Is there any reason that those printouts could not simply 1.0 11 be maintained? MS. TSOCHLAS: All of the printouts are 12 13 maintained. SPECIAL MASTER BUNDY: All of the 14 15 printouts are maintained by the vessel? MS. TSOCHLAS: And we maintain all the 16 17 printouts for three years. So, any vessel you go on now will have all the printouts 18 generated from the time of the installation 19 20 of the SWOMS. MR. WIGGER: And at the end of the 21 22 month, you can go back and -- of course, those are transmitted at the end of the 23 24 month -- or, actually, daily.

Daily.

MR. KARAGIORGIS:

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MR. WIGGER: But then you can go back and compare the soundings to the -- well, you don't.

SPECIAL MASTER BUNDY: I guess I'm getting confused, because if the enviro-logger prints out everyday a sheet for the chief engineer, which is maintained, which describes the -- what is on that printout, is it just the OOGMT sounding?

No.

MR. KARAGIORGIS:

MS. TSOCHLAS: Exactly. It's exactly—
the printout is exactly the same as what is
transmitted to the company, the report that
is transmitted to the company. It's an OOGMT
report that's generated, which shows the time
sounding levels, the oily water separator
operation, and the incinerator operation.

SPECIAL MASTER BUNDY: So, what would the chief engineer compare the enviro-logger to, the manual sounding that occurred in time --

MS. TSOCHLAS: The manual soundings, yes. Everyday he compares the manual soundings with the printouts on the enviro-logger.

MR. KARAGIORGIS: At that time. 1 2 same time. 3 SPECIAL MASTER BUNDY: Well, but the 4 manual sounding isn't done at 00GMT. 5 MR. KARAGIORGIS: Yes. SPECIAL MASTER BUNDY: So, it could be 6 7 done as much as 12 hours or 24 hours --MS. TSOCHLAS: He'll do the same thing 8 9 that we do, he'll check that there's the 10 minimum/maximum in line. If there's a big 11 difference, the chief engineer is capable of 12 printing out a report in order to obtain 13 those readings at that time. The actual 14 readings at the time. 15 SPECIAL MASTER BUNDY: At the time of what? At the time of the manuals? 16 MS. TSOCHLAS: At the time that he's 17 18 carrying out the manual soundings. 19 MR. WIGGER: So, he can query the system 20 at the time that he's carrying out the manual 21 soundings and see if it's in alignment with 22 the manual soundings less than five percent 23 and he could print that out, or he could choose not to print it out. Okay? Whatever. 24 25 Now by not printing it out, you don't have

the record that an auditor can go back and look at, and what Captain Joshi's point was, why not, since that data is available and he's looking at it, why not write it down on that form and that way you have a record, so if there is a discrepancy — as you point out, if it's more than five percent, he's required to notify the company, but from an auditor point of view, what if it is more than five percent and he doesn't notify the company? The data is not there to look at.

So, you know, again, when you do any audit, if it's not documented, how can you check it?

SPECIAL MASTER BUNDY: I have another question --

MS. TSOCHLAS: It is documented because the chief engineer will have a printout and he will mark on the daily checklist that he's carried out that comparison.

I think what Captain Joshi wants to see was the actual calculation.

MR. WIGGER: Well, that was a question,
I guess. When the manual sounding is taken
and the SWOMS is queried, is it required they

1	print that out from the SWOMS?
2	MS. TSOCHLAS: Well, as you said, in
3	order for him to check that it's in line, he
4	has to.
5	MR. WIGGER: He has to print it? I
6	thought there was a digital read on that, no?
7	MR. KARAGIORGIS: There is also a
8	MR. WIGGER: There's a digital read that
9	he can look at but not print it?
10	MS. TSOCHLAS: Yes.
11	SPECIAL MASTER BUNDY: But if he prints
12	it, then that could be preserved
13	MS. TSOCHLAS: All the printouts are
14	preserved.
15	SPECIAL MASTER BUNDY: So, let's see if
16	I'm right. Let's suppose on January 13th,
17	tomorrow, the chief the tanks are sounded
18	manually, he gets his readings, he then will
19	go to the enviro-logo and printout the
20	enviro-logger readings at that time and
21	compare them?
22	MS. TSOCHLAS: Exactly. Unless there
23	haven't been any changes in the engine room
24	since the readings were carried out by the
25	automatic report

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SPECIAL MASTER BUNDY: By changes in the engine room, you mean any tank transfers?

MS. TSOCHLAS: Any transfer of the oil There is a chance that they will coincide. It depends on where the vessel is But he has to and what the vessel is doing. be able to make sure that the SWOMS readings are in line with the tank -- with the manual readings. If there's a big difference in time or there's been changes in the engine room starters in the time between the manual room readings and the SWOMS reading, he will generate a report and will cross-check it, and then he will complete on the checklist that he has carried out that comparison.

SPECIAL MASTER BUNDY: I see. But in order to do the comparison, he prints out the enviro-logger data.

THE WITNESS: Yes.

SPECIAL MASTER BUNDY: And he preserves that now?

MS. TSOCHLAS: It has to be preserve because the right of the company is that all the enviro-logger printouts will be preserved for three years on the vessel.

SPECIAL MASTER BUNDY: So, when Captain Joshi went onboard what he should have been able to find was everyday, or close to everyday, there would be his manual -- a log of the manual soundings and an enviro-logger printout about the same time that the chief engineer used to do the comparison?

MS. TSOCHLAS: Yes. But you have to keep in mind that it's a paper ribbon, so when the printouts are removed from the unit, at the end of the paper ribbon, when they replace the ribbon. Like a cashier.

SPECIAL MASTER BUNDY: Right.

So, when he goes to the enviro-logger machine, he will just take a look at that printout — that part of the ribbon as it comes out, but, nonetheless, when they change the ribbon, that whole ribbon is preserved, and it has the date and the time on it of the printout?

MS. TSOCHLAS: Exactly. And that's why
I think captain Joshi considered for auditing
purposes it would be easier if we included
all of the daily comparison calculation.

MR. WIGGER: So, you're getting two

printouts a day then? 1 2 MS. TSOCHLAS: Yes. So it 3 SPECIAL MASTER BUNDY: automatically prints out at 00GMT --4 MS. TSOCHLAS: And then it's transmitted 5 6 as well to the company. Right. 7 SPECIAL MASTER BUNDY: MS. TSOCHLAS: The printouts that are 8 generated by the chief engineer when pressing 9 10 the button are not transmitted to the 11 company. SPECIAL MASTER BUNDY: And the system 12 doesn't have the capability of doing that? 13 mean, if a chief engineer wanted to transmit 14 15 it to you, could he? MS. TSOCHLAS: No, the system doesn't 16 17 have that capability, but we could go back to Vigilant and ask -- that's what Mr. Chalos 18 mentioned earlier as one of the solutions. 19 SPECIAL MASTER BUNDY: That would seem 20 to me to be the perfect solution. 21 22 MR. WIGGER: Yeah, when he presses the 23 button, it goes. And it 24 SPECIAL MASTER BUNDY: It goes. 25 maintains -- well, a solution.

And so, what Captain Joshi suggested as well is why not have a form where instead of just looking at them, the chief engineer will copy them down on the form so that anybody coming afterwards, whether it's the auditor, port state control, anybody could look at it and see what it says.

MS. TSOCHLAS: Exactly.

MR. WIGGER: By having a check mark, you actually have the data on the form and you could look at it, and from an auditor's perspective, it just simplifies things.

SPECIAL MASTER BUNDY: Right now, the chief officer writes, yes, I did compare them but doesn't write it down.

MR. CHALOS: The record does exist if the auditor wants to look at the record, but he'd have to go through this tape to get to the date.

SPECIAL MASTER BUNDY: Right.

MR. WIGGER: And he's only -- and his records was, you know, and you ought to consider this, but he didn't -- it's not a --

SPECIAL MASTER BUNDY: And ENV023 form, is that checklist?

1	MR. WIGGER: Yeah, and it was
2 -	erroneously put in as 024. I think there
3	were some revisions on the forms at one time.
4	Maybe 24 used to be 23, somehow we did get
5	confused.
6	MS. TSOCHLAS: We never had a 24 form.
7	SPECIAL MASTER BUNDY: Okay. I think I
8	understand the situation.
9	And that checklist was developed by
10	Vigilant Marine, that was their suggestion?
11	MS. TSOCHLAS: We developed the
12	checklist based on the guidelines provided by
13	Vigilant Marine. Vigilant Marine provided us
14	with what has to be checked on a daily basis,
15	weekly basis, and a monthly basis, and we
16	developed the form accordingly.
17	SPECIAL MASTER BUNDY: Okay. Does that
18	raise any questions?
19	MR. O'CONNELL: No.
20	SPECIAL MASTER BUNDY: Number six, or
21	recommendation number six, that has to do
22	with I think we covered that.
23	MS. TSOCHLAS: Yeah, I think we
24	discussed that earlier.

MR. WIGGER: And, of course, the last